60B

IIII NETWORK TESTING

- Up to 70 dB attenuation

- Typical 2.5 dB insertion loss

- Automatic attenuation sequence with Program mode

- Standard Universal Interface

EXFO

EXPERTISE REACHING OUT

Lab and Field Versatility

This portable variable attenuator performs just as well in a laboratory environment as it does in the field. Superior specifications make it the variable attenuator of choice for a number of applications. For lab or fieldwork flexibility, choose the FVA-60B.

Total Flexibility

Three attenuation display modes:

- Absolute (including insertion loss)
- Relative (in reference to 0.00 dB level)
- x + b (arbitrary value)

Program mode: Cycles through a repeatable sequence of up to 60 attenuation steps, pausing for one second or up to 60 hours at a time. The Program mode is particularly suited to accelerated bit-error-rate (BER) testing.

Fourteen available wavelengths: Matches your source wavelength to the nearest 10 nm for unbeatable accuracy.

Variable scanning speed: Scans the complete attenuation range at four different speeds according to the selected step size (0.05, 0.20 or 1.00 dB/step and variable step size).

Remote Control Capability

Operate the FVA-60B remotely from your PC using the standard RS-232 interface and control codes. Program software solutions are adapted to your testing needs.

Three-Way Powering Goes a Long Way

The FVA-60B features three complementary power sources for extended operation: a rechargeable NiCd battery, a 9 V alkaline backup battery and an AC adapter/charger for continuous operation.

KEY FEATURES

- Accurate system loss simulation
- Return loss of > 40 dB
- RS-232 computer interface for custom applications

Exceptional Specifications

High-quality optical components make the FVA-60B Variable Attenuator the standard for performance and flexibility. EXFO's computer-assisted calibration techniques deliver remarkable specifications:

- ± 0.15 dB linearity from 2.5 dB to 65 dB
- 0.05 dB resolution
- ± 0.10 dB repeatability

Multiple Applications

The FVA-60B enables consistent operation in various manual or automated testing situations.

- BER testing
- System testing and acceptance
- Power meter calibration and verification
- Optical margin analysis
- System loss simulation
- Field, manufacturing and R&D applications

SPECIFICATIONS[1]

Model		FVA-60B-B-XX	FVA-60B-C-XX	FVA-60B-D-XX	FVA-60B-E-XX
Fiber type (μm)		9/125	50/125	62.5/125	100/140
Calibration wavelengths (nm)		1310/1550	1300	1300	1300
Attenuation maximum (dB)		70	65	65	65
Insertion loss[2, 3] (dB)	typical	2.5	2.5	2.5	2.5
	maximum	3.5	4.0	4.0	4.0
Resolution (dB)		0.05	0.05	0.05	0.05
Linearity[4] (dB)		± 0.15	± 0.15	± 0.15	± 0.15
Repeatability (dB)	typical	± 0.03	± 0.03	± 0.03	± 0.03
	maximum	± 0.10	± 0.10	± 0.10	± 0.10
Return loss[2] (dB)	typical	45	27	27	27
	minimum	40	20	20	20

GENERAL SPECIFICATIONS

Size		22 cm x 11 cm x 5 cm	(8 $\frac{3}{4}$ in x 4 $\frac{1}{2}$ in x 2 in)
Weight	unit	0.75 kg	(1 $\frac{1}{2}$ lb)
	shipping	2.5 kg	(5 $\frac{1}{2}$ lb)
Temperature	operating	−10 °C to 50 °C	(14 °F to 122 °F)
	storage	−30 °C to 70 °C	(−22 °F to 158 °F)
Relative humidity		0 % to 95 % non-condensing	
Power		AC charger (continuous operation), NiMH (5 to 25 hours depending on usage),	
		9 V alkaline batteries (3 to 10 extra hours depending on usage)	
Speed		0 to 70 dB in 10 seconds at maximum scan rate	

NOTES

1. At 23 °C ± 2 °C unless otherwise specified.
2. At 1310 nm and 1550 nm for singlemode fiber; at 850 nm and 1300 nm for multimode fiber. The insertion loss is dependent on the input numerical aperture.
3. With FC/UPC connectors for singlemode fiber and FC/PC for multimode fiber.
4. At a calibrated wavelength, using a non-polarized light source with 0.002 dB stability (source accuracy of ± 0.5 nm) and up to 50 dB of attenuation.

14 wavelengths available, of which two can be picked for quick toggling.

Multimode (nm)	820, 830, 840, 850, 860, 870, 880, 1270, 1280, 1290, 1300, 1310, 1320, 1330
Singlemode (nm)	1280, 1290, 1300, 1310, 1320, 1330, 1340, 1520, 1530, 1540, 1550, 1560, 1570, 1580

STANDARD ACCESSORIES

User guide, carrying case, protective holster, shoulder strap, RS-232 serial interface (comes with cable and application software), AC adapter/charger, 9 V alkaline battery, Certificate of Compliance

BELLCORE PRODUCT CODES

Model	CPR#	ECI#	CLEI#
FVA-60B	574669	661071	LGTDJ20AAA

ORDERING INFORMATION

Rugged Handheld Solutions		Optical Fiber	DWDM Test Systems	Transport/Datacom
OLTS		OTDR	OSA	10/100 and Gigabit Ethernet
Power meter		OLTS	PMD analyzer	SONET/SDH (DS0 to OC-192c)
Light source		ORL meter	Chromatic dispersion analyzer	SDH/PDH (64 kb/s to STM-64c)
Talk set		Switch	Multiwavelength meter	SAN